

# PHILIPS

**Philips Medical Systems**

---

**SERVICE MANUAL**  
**732**  
**SYSTEM**

**Installation Manual PCR CosimaX**

**MCR 2601**

DMC Hamburg

Printed in Hamburg, Germany

© 2004 Philips Medical Systems  
ALL RIGHTS RESERVED

## **SERVICE MANUAL – SYSTEM**

### **Installation Manual PCR CosimaX**

Author: C. Siems

### **MCR 2601**

In case there are any questions concerning this manual,  
please send this LOPAD via fax to +49 40 5078 - 2481

File: SMI CosimaX 27721\_AC .doc

---

#### **List of pages and drawings (LOPAD)**

**Manual Order No: 4512 984 27721**  
**released 5/2004**

1  
2

3 ...11 (04.1)

Installation CosimaX (04.0) 011-202-03/ PMS(04.0), Fuji Photo Film Co., Ltd.

## Contents

1	Introduction.....	4
1.1	System components.....	4
1.2	Documentation.....	4
1.3	Data flow .....	4
2	System installation .....	5
2.1	Introduction.....	5
2.2	Installation overview .....	5
2.3	Connection diagram .....	5
2.4	Installing the Reader .....	6
2.5	Installing the Preview Unit.....	6
2.5.1	Unpacking .....	6
2.5.2	Checking the items supplied.....	6
2.5.3	Installing Memory.....	6
2.5.4	Cable connections .....	7
2.5.5	Software installation and configuration.....	7
2.5.6	Certificate of authenticity.....	7
2.6	Installing the PCR User Terminal(s) .....	8
2.6.1	Unpacking .....	8
2.6.2	Checking the items supplied.....	8
2.6.3	Cable connections .....	8
2.6.4	Software installation and configuration.....	8
2.7	Installing the EasyVision .....	9
2.7.1	Unpacking .....	9
2.7.2	Cable connections .....	9
2.7.3	Software configuration .....	9
3	First start-up .....	10
3.1	Final checks .....	11
3.2	Cleaning the equipment .....	11

## 1 Introduction

### 1.1 System components

A PCR CosimaX system consists of the following sub-systems:

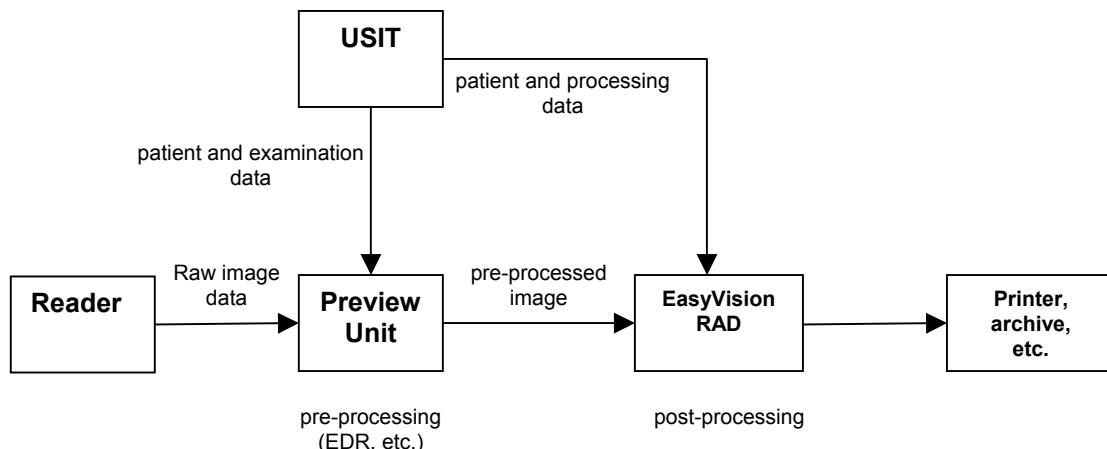
- PCR CosimaX Reader (IR-363)
- PCR Preview Unit (IBM NetVista PC + monitor with optional touch screen)
- PCR User Terminal (IBM NetVista PC + operation panel)
- EasyVision RAD (Sun workstation + monitor)

### 1.2 Documentation

The following documentation is delivered:

<b>CD-ROM: PCR systems documentation</b>	4512 984 26683 and higher
Containing all service manuals, release bulletins, etc. in PDF	
<b>System</b>	
Installation Manual PCR CosimaX	This Manual
<b>PCR Preview Unit</b>	
Service Manual PCR Preview Unit / Console Compano S	4512 984 2458x
Release Bulletin PCR Preview Unit	4512 984 2780x
<b>PCR CosimaX Reader</b>	
Installation Manual PCR CosimaX Reader	Appendix to this manual
Release Bulletin PCR CosimaX/ Corado Reader	4512 984 2774x
<b>PCR User Terminal</b>	
Release Bulletin PCR User Terminal R 1.5	4512 984 2476x
Release Bulletin RIS	4512 984 2477x
Release Bulletin DICOM/WLM RIS	4512 984 2478x
Service Manual PCR PC	4512 984 2458x
<b>EasyVision RAD</b>	
Release Bulletin EasyVision RAD R4.2V2	4522 170 0117x
Service Manual sub system	4512 984 2236x
Service Manual unit	4522 981 0439x

### 1.3 Data flow



## 2 System installation

### 2.1 Introduction

This chapter describes the steps to be performed during installation of a PCR system. Detailed procedures can be found in the belonging sub-system manuals and Release Bulletins.

The PCR Preview Unit serves as a gateway between Reader and EasyVision, emulating a PCR AC500 or Cosima Reader. The Reader reads the image and transfers raw data to the Preview Unit. Preprocessing (EDR etc.) is then done in the Preview Unit. Afterwards the image is sent in DICOM format to the EasyVision for post processing and distribution to other destinations like printers, archives etc.

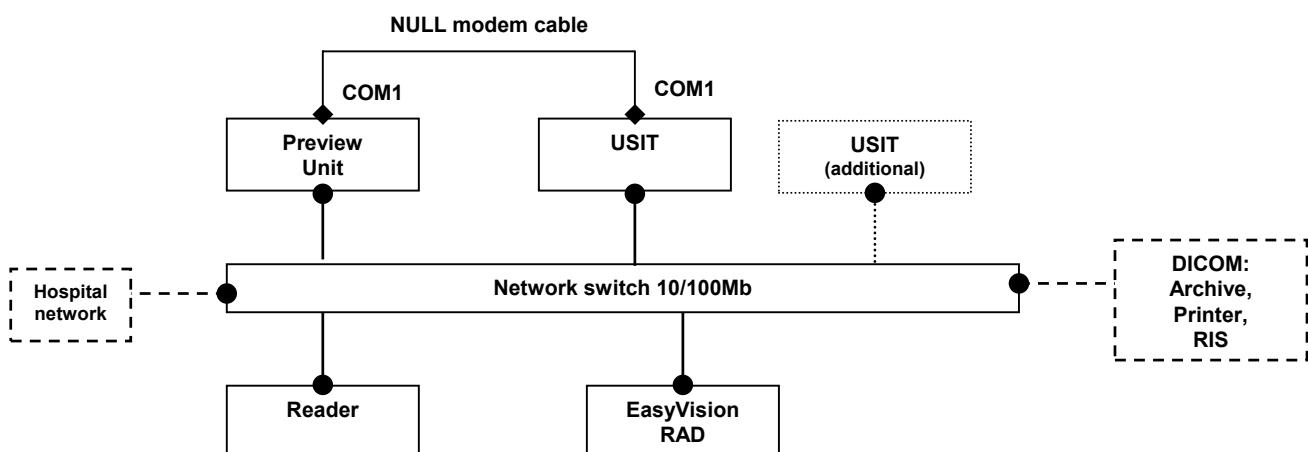
The **Reader ID** in the USIT configuration must always be set to "A", even if there are more than one Readers in the same cluster. Otherwise the USIT comes up with an error message: "Reader ID mismatch".

When configuring the Reader within the EasyVision RAD configuration program you need to configure a **Reader Node** using the IP address and name of the Preview Unit.

### 2.2 Installation overview

1. Unpacking and installing the Reader.
2. Unpacking and installing the PCR Preview Unit (PC) + Monitor.
3. Software installation and configuration at the Preview Unit according to the Release Bulletin of the Preview Unit.
4. Unpacking and installing the USIT(s) and operation panel(s).
5. Software installation and configuration at the USIT according to the Release Bulletin USIT(s).
6. Unpacking and installing the EasyVision RAD(s).
7. Software configuration according to the Release Bulletin EasyVision RAD.
8. Final checks.

### 2.3 Connection diagram



## 2.4 Installing the Reader

Unpack and install the Reader according to the attached service manual of the Reader.

Recommended type of network cable: UTP CAT 5

## 2.5 Installing the Preview Unit

### 2.5.1 Unpacking

- Unpack the PC
- Unpack the monitor

### 2.5.2 Checking the items supplied

Item	Qty.	Remark	Check
<b>PC IBM Netvista M42</b>			
Keyboard	1	U.S. layout	
Mouse	1	PS/2	
Serial cable, 5 m (Nullmodem)	1	Connection to USIT	
Power cable 115 V	3	U.S.	
Power cable 230 V	1	Europe (not U.K.)	
STP patch cable	2	network	
Sticker "Certificate of Authenticity"	1	License for Windows 2000	
512 MB memory module	1	To be installed in this PC additionally	
<b>Monitor (touch screen optional)</b>			
Monitor	1		
External power supply + cable	1	Optional, depends on type of monitor	
CD-ROM	1	Optional, driver software for touch screen	

Some connectors on the rear of the computer are color-coded to help to determine where to connect the cables on the computer. The following illustration shows the location of the connectors on the rear of the computer (IBM Netvista M42, Type 8303).

### 2.5.3 Installing Memory

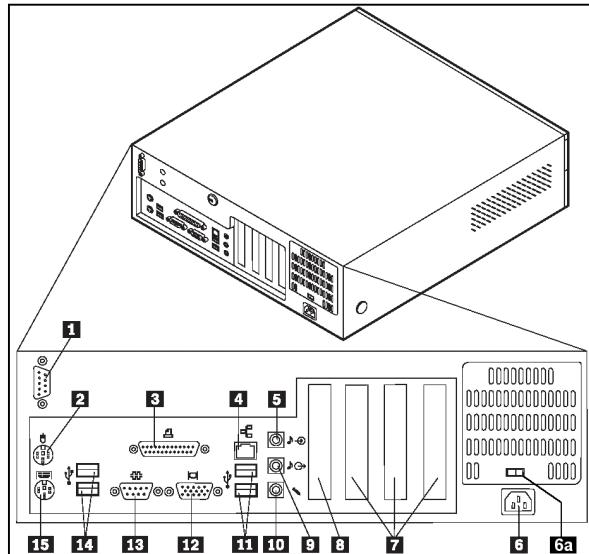
- Remove the cover of the PC.
- Locate the two DIMM connectors.
- Insert the additional 512 MB module straight down into the second connector until the retaining clips close.

### 2.5.4 Cable connections

Connect the cables accordingly:

1 Serial port (COM2)	→	touch screen (optional)
2 Mouse connector	→	mouse
4 Ethernet connector	→	network cable
6 Power connector	→	power cable
12 VGA connector	→	monitor / display
13 Serial port (COM1)	→	Null modem cable to USIT
15 Keyboard connector	→	keyboard

Set the power selector switch [6a] according to the local mains voltage to 115 V or 230 V (default is 230V).

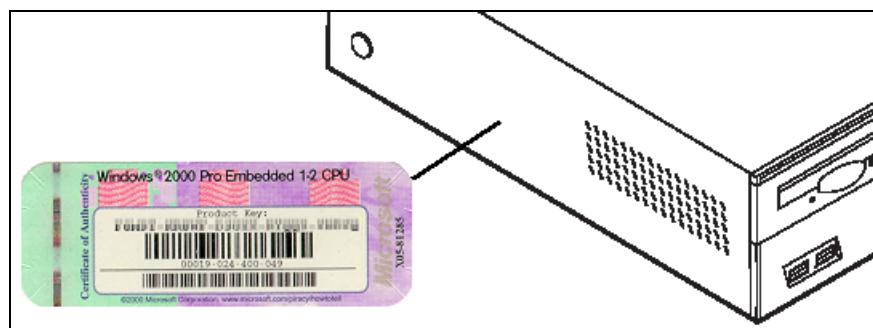


### 2.5.5 Software installation and configuration

Now perform software installation and configuration according to the **Release Bulletin PCR Preview Unit**.

### 2.5.6 Certificate of authenticity

For legal reasons: Place the separately delivered (together with the CE-documents) sticker **Certificate of Authenticity** for Windows 2000 on the left hand side of the PC cover. If a sticker already exists place the new sticker onto the existing one.



## 2.6 Installing the PCR User Terminal(s)

### 2.6.1 Unpacking

- Unpack the PC(s).
- Unpack the operation panel(s).

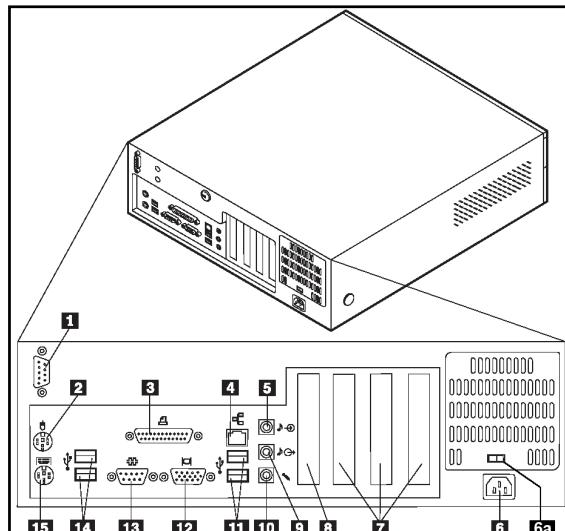
### 2.6.2 Checking the items supplied

Item	Qty.	Remark	Check
<b>PC IBM Netvista M42</b>			
Keyboard	1	U.S. layout	
Mouse	1	Spare	
Serial cable, 3 m (Nullmodem)	1	Spare	
Power cable, 115 V	3	U.S.	
Power cable, 230 V	1	Europe (not U.K.)	
STP patch cable	2	network	
<b>Operation Panel</b>			
Power cable, 115 V	1	U.S.	
Power cable, 230 V	1	Europe (not U.K.)	
VGA cable	1		
PS/2 cable	1		
Feet	2		
Holder for barcode scanner	1		
Barcode Scanner incl. Y cable	1	separate item	
Wall Mount for Operation Panel	1	optional	

### 2.6.3 Cable connections

Connect the cables accordingly:

4 Ethernet connector	→ network cable
6 Power connector	→ mains cable
12 VGA connector	→ USIT operation panel
13 Serial port (COM1)	→ Null modem cable to Preview Unit
15 Keyboard connector	→ PS/2 cable to Operation Panel



Set the power selector switch [6a] according to the local mains voltage to 115 V or 230 V (default is 230V).

### 2.6.4 Software installation and configuration

Now perform software installation and configuration according to the **Release Bulletin PCR User Terminal**. Please note that the **Reader ID** in the USIT configuration must always be set to "A", even if there are more than one Readers in the same cluster. Otherwise the USIT comes up with an error message: "Reader ID mismatch".

Select the **Reader type** depending on the software releases:

USIT 1.5L2	3 = AC500, AC3000, AC5000 or 9000
USIT 1.5L3 and higher	1 = Preview Unit 1.2 and higher or 2 = Preview Unit 1.1, AC500(0)/3000/9000 reader

## 2.7 Installing the EasyVision

### 2.7.1 Unpacking

- Unpack the EasyVision RAD and its components including the monitor.

### 2.7.2 Cable connections

- Make sure the power selector switch of the computer is set to the correct mains voltage.
- Connect the hardware components of the EasyVision RAD according to the belonging sub-system Service Manual.
- Connect power cable to mains and connect network cable (STP) to the network.

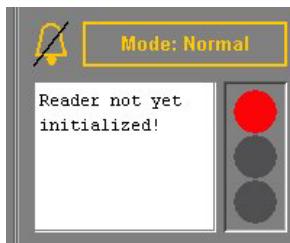
### 2.7.3 Software configuration

Now perform software configuration according to the **Release Bulletin EasyVision RAD**.

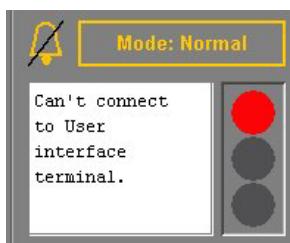
**Note:** When configuring the Reader within the EasyVision RAD configuration program you need to configure a Reader Node using the IP address of the PCR Preview Unit.

### 3 First start-up

1. Switch on the Reader, switch on the Preview Unit.
2. The Preview Unit application software starts automatically in a minute.
3. When starting the application is done the application window shows a message to indicate that the Reader is being initialized and the traffic light is still on red:



4. Switch on the USIT, switch on the EasyVision.
5. When the Reader has initialized, the error message **Reader not yet initialized** should disappear.
6. While the USIT is still booting you'll get an error window and the status window shows:



7. Wait until the USIT is up and running, then click [Confirm] to the error message on the Preview Unit:



8. Now you should get GREEN at the traffic light. The system is operational.



### 3.1 Final checks

Run the following checks on the output image:

- Image and convenience checks according to chapter 9 of the reader installation manual.
- Output to the printer
- Output to the archive if present

### 3.2 Cleaning the equipment

Clean the monitors and the computers with a dry cloth. Clean the covers of the Reader with a moistened cloth.